Exhibit J

Exhibit J - U.S. Patent No. 11,176,538

Claim No.

19[Pre]: A method of performing an online payment transaction, the method comprising:

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

An Apple Pay-, Apple Wallet, and/or Apple Cash-enabled computing device performs an online payment transaction.



In apps and online. Use Apple Pay for purchases in Safari on your iPhone, iPad, or Mac. You can skip the lengthy checkout forms and pay with just a touch or a glance. Or use Apple Pay to subscribe to services like Apple Music, Apple News+, and Apple TV+, buy apps and games on the App Store, and upgrade your iCloud storage.

See, e.g., Apple Pay, Apple, https://www.apple.com/apple-pay/; Devices compatible with Apple Pay, Apple (Sept. 24, 2024), https://support.apple.com/en-us/102896; Abby Ferguson, How to set up Apple Pay, Popular Sci. (May 12, 2024 3:04 PM EDT), https://www.popsci.com/diy/how-to-set-up-apple-pay/ ("[The Wallet app] is pre-installed on Apple devices, so you won't need to install it first.").

Pay with your virtual card number

If you need to give a card number when you check out online or in stores where Apple Pay isn't accepted, you can <u>find your virtual card number in the Wallet app</u>. If you use Apple Card Family² and you share your account with a co-owner³, you each have your own virtual card number.

Your virtual card number is different from your titanium card number and Apple Pay card number.

See, e.g., How to make purchases with Apple Card, Apple (Sept 18, 2024), https://support.apple.com/en-us/104951.

Use your virtual card number for Apple Cash

Use your Apple Cash virtual card number to make secure purchases online where Apple Pay isn't yet available.

See, e.g., Use your virtual card number for Apple Cash (Sept. 26, 2024), https://support.apple.com/en-us/119943.

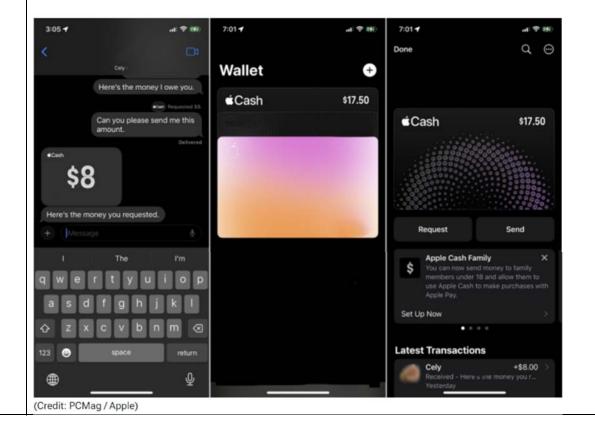
[...]

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

Request Money from Another Person You can also request money from another individual. To do this, open the Wallet app, select the

Apple Cash card, and then tap the **Send or Request** button. Type the name, email address, or phone number of the person from whom you're requesting the money.

The other person must tap the **Pay** button on the request to approve the transfer. The amount owed is listed at the bottom of the screen, allowing the person to alter the final amount. Once the request has been paid, you will receive another text back showing the amount of money they sent.

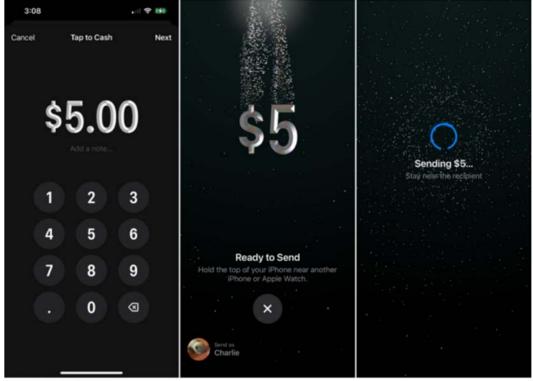


Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

Exchange Money With Tap to Cash

If you and a fellow iPhone user are running <u>iOS 18</u>, you can use the new Tap to Cash feature to exchange money. To set this up, go to **Settings > General > AirDrop**, and make sure **Bringing Devices Together** is enabled.

Double click the side button to confirm the transaction and hold your iPhone next to the iPhone of the other person. The other person should then accept the transaction, and the money is transferred to their Apple Cash account.



(Credit: PCMag / Apple)

See, e.g., Lance Whitney, How to Send Money to Friends (or Request They Pay Up) With Apple Cash, PCMag (Aug. 15, 2024), https://www.pcmag.com/how-to/use-apple-cash-send-request-money.

19[a]: receiving an input signal at an electronic device, the input signal corresponding to a request for payment of an online payment transaction by said electronic device, via a wireless interface of the electronic device;

19[b] a displaying of the payment request notification at a touch-screen display user-interface of the electronic device; and,

19[c]: upon an authorizing of a valid device user, displaying at least one userselectable payment account option, and requesting a user approval of payment, via the touch-screen display userinterface;

19[d] receiving, from a valid device user, a payment selection and authorization approval input on the electronic device;

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

An Apple Pay-, Apple Wallet, and/or Apple Cash -enabled computing device receives an input signal at an electronic device, the input signal corresponding to a request for payment of an online payment transaction by said electronic device, via a wireless interface of the electronic device; displays the payment request notification at a touch-screen display user-interface of the electronic device; upon an authorizing of a valid device user, displays at least one user-selectable payment account option, and requesting a user approval of payment, via the touch-screen display user-interface; and receives, from a valid device user, a payment selection and authorization approval input on the electronic device.

How to use Apple Pay online or in apps

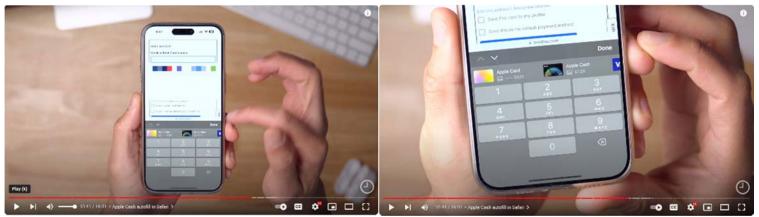
You can use Apple Pay to pay online or in apps when you see Apple Pay as a payment option.^{2,3}

- 1. Tap the Apple Pay button or choose Apple Pay as your payment method.
- 2. To pay with a different card, tap Other Cards & Pay Later Options or Change Payment Method to change your default card.
- 3. If necessary, enter your billing, shipping, and contact information. Apple Pay stores that information, so you won't need to enter it again.
- 4. Confirm the payment.
 - iPhone or iPad with Face ID: Double-click the side button, then use Face ID or your passcode.
 - $\circ\,$ iPhone or iPad without Face ID: Use Touch ID or your passcode.
 - o Apple Vision Pro: Use Optic ID or your passcode.
 - Apple Watch: Double-click the side button.
 - $\circ\,$ Mac with Touch ID: Place your finger on Touch ID.
 - Mac without Touch ID: Confirm the payment on your Bluetooth-connected iPhone or Apple Watch. Make sure that you're signed in to the same Apple Account on all devices.
- 5. When your payment is successful, you'll see Done and a checkmark on the screen.
- See, e.g., Make purchases using Apple Pay, Apple (Sept. 24, 2024), https://support.apple.com/en-us/102626.

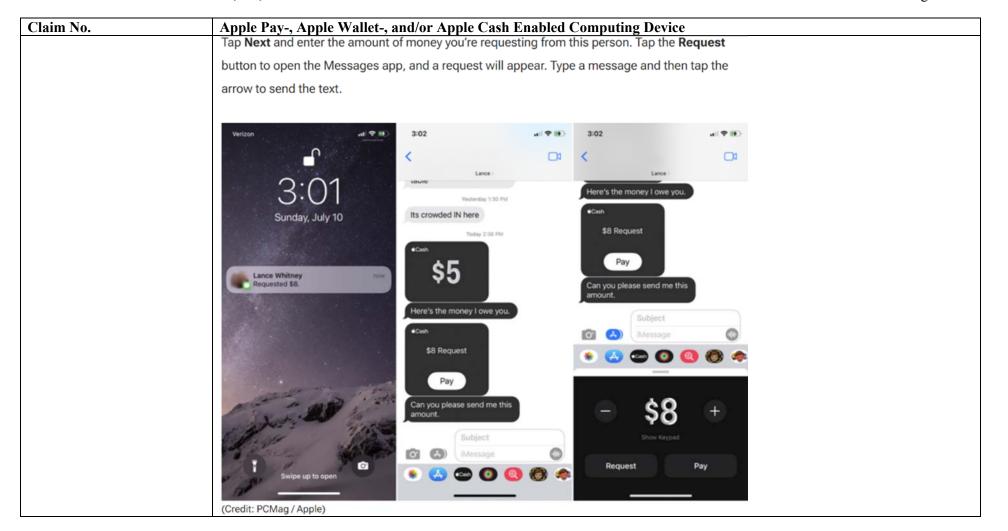
Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device



See, e.g., Apple, Apple Pay Merchant Integration Guide at 3 (Jan. 2024) available at http://developer.apple.com/apple-pay/Apple-Pay-Merchant-Integration-Guide.pdf; Get started with Apple Pay on the Web, Apple Developer, https://developer.apple.com/videos/play/tech-talks/111381/.

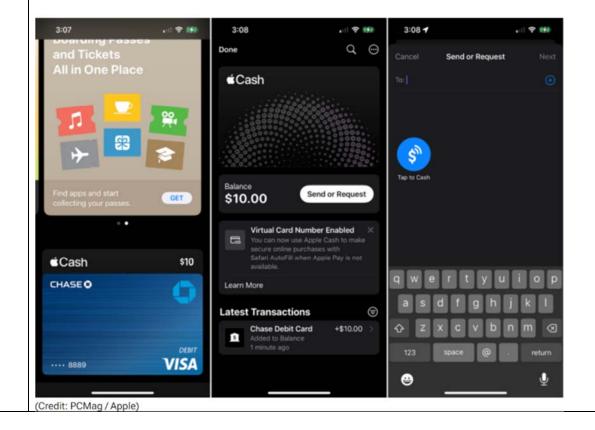


See, e.g., 9to5Mac, *iOS 17.4 – 30+ New Changes and Features*, YouTube (Feb. 28, 2024), https://www.youtube.com/watch?v=wT5osIMpyuQ&t=635s.



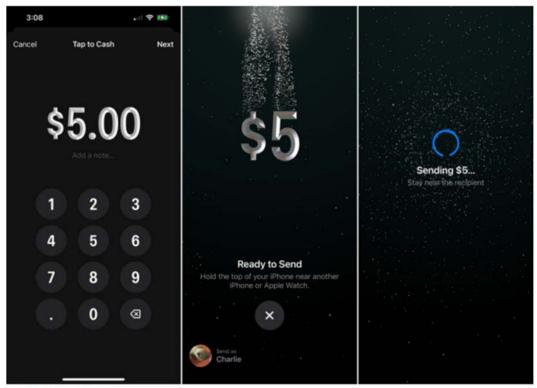
Claim No. Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device The other person must tap the Pay button on the request to approve the transfer. The amount owed is listed at the bottom of the screen, allowing the person to alter the final amount. Once the request has been paid, you will receive another text back showing the amount of money they sent. 3:05 ◀ 7:01 🕇 .al 🗢 🛤 7:01 🗸 Done Q Θ Wallet **Ć**Cash \$17.50 **Cash** Can you please send me this \$17.50 Here's the money you requested. Request Send **Apple Cash Family** Set Up Now **Latest Transactions** 123 🐵 +\$8.00 \$ (Credit: PCMag / Apple)

Claim No. Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device Exchange Money With Tap to Cash If you and a fellow iPhone user are running iOS 18, you can use the new Tap to Cash feature to exchange money. To set this up, go to Settings > General > AirDrop, and make sure Bringing Devices Together is enabled. Next, open the Wallet app and tap the Apple Cash card. Tap the Send or Request button and then select Tap to Cash. Enter the amount you want to send, then tap Next.



Claim No. Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

Double click the side button to confirm the transaction and hold your iPhone next to the iPhone of the other person. The other person should then accept the transaction, and the money is transferred to their Apple Cash account.



(Credit: PCMag / Apple)

See, e.g., Lance Whitney, How to Send Money to Friends (or Request They Pay Up) With Apple Cash, PCMag (Aug. 15, 2024), https://www.pcmag.com/how-to/use-apple-cash-send-request-money; Sharing Files with AirDrop on iPhone or iPad, Apple Device Support Tutorials, https://it-training.apple.com/tutorials/support/sup050/ ("AirDrop uses Bluetooth to discover nearby devices and Wi-Fi to transfer data between devices. If the devices leave Bluetooth or Wi-Fi range of each other after you initiate an AirDrop transfer, the transfer can continue over the internet.").

19[e] generating at least one limited-use numbers at said electronic device, and using said limited-use number in place of at least a portion of selected account issuer payment information; and

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

An Apple Pay-, Apple Wallet, and/or Apple Cash-enabled computing device generates at least one limited-use numbers at said electronic device, and using said limited-use number in place of at least a portion of selected account issuer payment information.

When you use Apple Pay within apps or on the web

[. . .]

To securely transmit your payment information when you pay in apps or on the web, Apple Pay receives your encrypted transaction and re-encrypts it with a developer-specific key before the transaction information is sent to the developer or payment processor. This key helps ensure that only the app or the website that you're purchasing from can access your encrypted payment information. Websites must verify their domain every time they offer Apple Pay as a payment option. Like with in-store payments, Apple sends your Device Account Number to the app or website along with the transaction-specific dynamic security code. Neither Apple nor your device sends your actual payment card number to the app

See, e.g., Apple Pay security and privacy overview, Apple (Oct. 8, 2024), https://support.apple.com/en-us/101554; Apple Platform Security, Payment authorization with Apple Pay, Apple (Feb. 18, 2021), https://support.apple.com/guide/security/payment-authorization-with-apple-pay-secc1f57e189/web.

What is Advanced Fraud Protection?

Advanced Fraud Protection is a way to keep your Apple Card information even more secure. After turning on Advanced Fraud Protection, your three-digit Apple Card security code will change periodically after it's been viewed in the Wallet app or after it's been auto-filled from Safari.

You should check your security code each time you want to make a purchase with Apple Card to be sure you're using the most up-to-date code. You can also use Advanced Fraud Protection without affecting your recurring purchases and subscriptions, such as streaming services or memberships, because these merchants use your security code to authorize payment just once when you first sign up.

See, e.g., Use Advanced Fraud Protection with Apple Card, Apple (Jan. 10, 2024), https://support.apple.com/en-us/102427.



Request a new number if you suspect your current one has been compromised. The virtual card number is available in Safari AutoFill when shopping online where Apple Pay is not available.

To keep your transactions secure, your security code changes when you open Wallet or use Safari AutoFill. Security codes expire after 24 hours. Learn More

See, e.g., Glenn Fleishman, How to pay even more safely with Apple Cash, Macworld (Apr. 12, 2024), https://www.macworld.com/article/2270855/safely-use-apple-cash.html.

Claim No. A

19[f] combining said at least one limited-use numbers, with said selected account information, to form a complete payment information; and,

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

An Apple Pay-, Apple Wallet, and/or Apple Cash-enabled computing device combines said at least one limited-use numbers, with said selected account information, to form a complete payment information.

Overview

Apple Pay is available on all iOS devices with a Secure Element — an industry-standard, certified chip designed to store payment information safely. In macOS, users must have an iPhone or Apple Watch that supports Apple Pay to authorize the payment, or have a Mac with Touch ID. The Secure Element creates a payment object when an app or website that uses Apple Pay sends a payment request.

The payment object has a nested structure that contains a payment token with encrypted payment data, as shown in the figure below.

Payment data keys

The decrypted payment data in the data value contains the following keys and values:

Key	Value	Description
applicationPrimary AccountNumber	string	Device-specific account number of the card that funds this transaction
applicationExpiration Date	date as a string	Card expiration date in the format YYMMDD
currencyCode	string	ISO 4217 numeric currency code, as a string to preserve leading zeros
transactionAmount	number	Transaction amount
cardholderName	string	Optional. Cardholder name.
deviceManufacturer Identifier	string	Hex-encoded device manufacturer identifier
paymentDataType	string	Either "3DSecure" or "EMV"
paymentData	payment data dictionary	Detailed payment data; see Detailed Payment Data Keys (3D Secure) and Detailed Payment Data Keys (EMV) below
authentication Responses	list of Authentication Response entries	For a multitoken request, a list of submerchant responses that contain cryptograms. See Authentication Response below.
merchantToken Identifier	string	For a merchant token request, the provisioned merchant token identifier from the payment network

PKPaymentToken Object

Transaction ID

Payment network

Payment token data
Signature
Header

Encrypted Payment data
Amount
Cardholder name

Payment processing data

Г

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device Claim No. Detailed payment data keys (EMV) If the paymentDataType value is "EMV" in the Payment Data Keys information, the payment data dictionary in paymentData contains the following keys and values: Key Value Description The Europay, Mastercard, and Visa (EMV) payment Output from the Secure emvData structure, as a Base64-encoded string Element The PIN is encrypted using encrypted The encrypted PIN, as a hex-encoded string the bank's key. PINData RSA_v1 only. See, e.g., Payment token format reference, Apple Developer, https://developer.apple.com/documentation/ passkit apple pay and wallet/apple pay/payment token format reference; PKPayment, Apple Developer, https://developer.apple.com/documentation/passkit apple pay and wallet/pkpayment. Use a virtual card via Safari AutoFill Name on card You can use an Apple Cash virtual number wherever you can use 0 Safari's AutoFill feature. I used a website designed to let you test filling in card information in a form, and Safari showed Apple Cash as an Type option alongside my Apple Card and other credit cards configured in Choose... 0 Settings > Safari > AutoFill > Saved Credit Cards. (An Apple Card and Credit card number Apple Cash are automatically available to AutoFill and can't be removed Done at that Settings location.) Tap the Apple Cash icon and the current virtual card number, expiration date, and security code will be filled in. If there's a prompt on the page QWERT for the payment network, Safari will choose Visa, which seems to be the only network used for Apple Cash. See, e.g., Glenn Fleishman, How to pay even more safely with Apple Cash, Macworld (Apr. 12, 2024), https://www.macworld.com/article/2270855/safely-use-apple-cash.html; Filipe Espósito, iOS 16 to add virtual cards support in Safari for online shopping, 9to5MAC (Jul. 6, 2022, 12:25 pm PT), https://9to5mac.com/2022/07/06/ios-16-virtual-cardssupport-safari/.

19[g] wherein the receiving of a user payment approval authorization through the user-interface of the electronic device, is comprising a displaying on said display at least a portion of information comprising: the payment request, the merchant, the amount, and the transaction information; and,

19[h] receiving a user input providing for at least one transaction authorization actions, from a set of actions including: approving a transaction, denying a transaction, selecting a user information, a payment amount adjustment, and selecting a transaction payment method; and,

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

An Apple Pay-, Apple Wallet, and/or Apple Cash-enabled computing device, when receiving a user payment approval authorization through the user-interface, displays on said display at least a portion of information comprising: the payment request, the merchant, the amount, and the transaction information; and receives a user input providing for at least one transaction authorization actions, from a set of actions including: approving a transaction, denying a transaction, selecting a user information, a payment amount adjustment, and selecting a transaction payment method.



See, e.g., Apple, Apple Pay Merchant Integration Guide at 3 (Jan. 2024) available at http://developer.apple.com/apple-pay/Apple-Pay-Merchant-Integration-Guide.pdf; Get started with Apple Pay on the Web, Apple Developer, https://developer.apple.com/videos/play/tech-talks/111381/.

(Credit: PCMag / Apple)

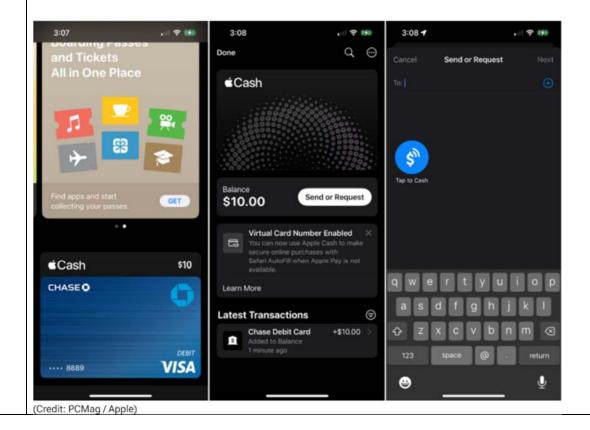
Claim No. Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device **Request Money from Another Person** [...] You can also request money from another individual. To do this, open the Wallet app, select the Apple Cash card, and then tap the Send or Request button. Type the name, email address, or phone number of the person from whom you're requesting the money. [...] Tap Next and enter the amount of money you're requesting from this person. Tap the Request button to open the Messages app, and a request will appear. Type a message and then tap the arrow to send the text. 3:02 3:02 Here's the money I owe you. Its crowded IN here Sunday, July 10 \$8 Request Pay Lance Whitney Can you please send me this Here's the money I owe you. \$8 Request 👄 🗿 📵 🚳 Pay Can you please send me this

Claim No. Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device The other person must tap the Pay button on the request to approve the transfer. The amount owed is listed at the bottom of the screen, allowing the person to alter the final amount. Once the request has been paid, you will receive another text back showing the amount of money they sent. 3:05 ◀ 7:01 🕇 .al 🗢 🛤 7:01 🗸 Done Q Θ Wallet **Ć**Cash \$17.50 **Cash** Can you please send me this \$17.50 Here's the money you requested. Request Send **Apple Cash Family** Set Up Now **Latest Transactions** 123 🐵 +\$8.00 \$ (Credit: PCMag / Apple)

Devices Together is enabled.

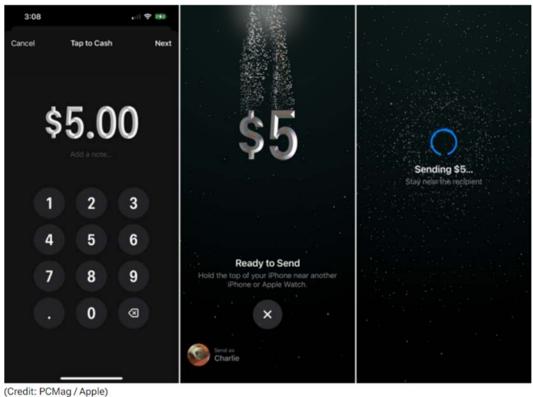
Claim No. Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device Exchange Money With Tap to Cash If you and a fellow iPhone user are running iOS 18, you can use the new Tap to Cash feature to exchange money. To set this up, go to Settings > General > AirDrop, and make sure Bringing

Next, open the Wallet app and tap the Apple Cash card. Tap the **Send or Request** button and then select **Tap to Cash**. Enter the amount you want to send, then tap **Next**.



Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

Double click the side button to confirm the transaction and hold your iPhone next to the iPhone of the other person. The other person should then accept the transaction, and the money is transferred to their Apple Cash account.



See, e.g., Lance Whitney, How to Send Money to Friends (or Request They Pay Up) With Apple Cash, PCMag (Aug. 15, 2024), https://www.pcmag.com/how-to/use-apple-cash-send-request-money.

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device Claim No. **● ■ ♥ ■ □** □ ● B 🖈 🗔 🗆 🕃 See, e.g., 9to5Mac, iOS 17.4 – 30+ New Changes and Features, YouTube (Feb. 28, 2024), https://www.youtube.com/watch?v=wT5osIMpyuQ&t=635s. 19[i] on receiving said user An Apple Pay-, Apple Wallet, and/or Apple Cash-enabled computing device, on receiving said user payment approval authorization input, transmits by the wireless interface of the approved complete payment information for the online transaction. payment approval authorization input, a transmitting by the wireless Payment flow interface of the approved Apple Pay uses device-specific tokenized credit or debit card credentials (DPAN) in place of a Payment complete payment Account Number (PAN). When users authenticate the payment using Face ID, Touch ID or their passcode, the tokenized card data is returned to your app or website. This token can then be passed to information for the online your Payment Service Provider (PSP) to process as you would for a typical online credit or debit card transaction. Authenticates with biometrics or passcode. Payment Data is encrypted and returned to the app/website Merchant App/Website Sends the Apple Pay payment object to merchant server

See, e.g., Apple, Apple Pay Merchant Integration Guide at 5 (Jan. 2024) available at http://developer.apple.com/apple-pay/Apple-Pay-Merchant-Integration-Guide.pdf; Get started with Apple Pay on the Web, Apple Developer, https://developer.apple.com/videos/play/tech-talks/111381/.

Claim No.	Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device
	Pay with your virtual card number
	If you need to give a card number when you check out online or in stores where Apple Pay isn't accepted, you can <u>find your virtual card number in the Wallet app</u> . If you use Apple Card Family ² and you share your account with a co-owner ³ , you each have your own virtual card number.
	Your virtual card number is different from your titanium card number and Apple Pay card number. See, e.g., How to make purchases with Apple Card, Apple (Sept. 18, 2024), https://support.apple.com/en-us/104951.
	Use your virtual card number for Apple Cash
	Use your Apple Cash virtual card number to make secure purchases online where Apple Pay isn't yet available. See, e.g., Use your virtual card number for Apple Cash (Sept. 26, 2024), https://support.apple.com/en-us/119943.

Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

Request Money from Another Person

[...] You can also request money from another individual. To do this, open the Wallet app, select the

Apple Cash card, and then tap the Send or Request button. Type the name, email address, or phone number of the person from whom you're requesting the money. [...] The other person must tap the Pay button on the request to approve the transfer. The amount owed is listed at the bottom of the screen, allowing the person to alter the final amount. Once the

request has been paid, you will receive another text back showing the amount of money they sent.

7:01 7 7:01 ₹ 3:05 ◀ Done Wallet Here's the money I owe you. **Ć**Cash \$17.50 Can you please send me this **Cash** \$17.50 Here's the money you requested. Request Send **Apple Cash Family** Set Up Now **Latest Transactions** +\$8.00 \$

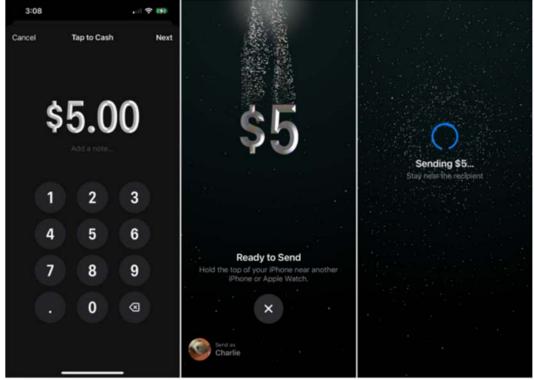
(Credit: PCMag / Apple)

Claim No. Apple Pay-, Apple Wallet-, and/or Apple Cash Enabled Computing Device

Exchange Money With Tap to Cash

If you and a fellow iPhone user are running <u>iOS 18</u>, you can use the new Tap to Cash feature to exchange money. To set this up, go to **Settings > General > AirDrop**, and make sure **Bringing Devices Together** is enabled.

Double click the side button to confirm the transaction and hold your iPhone next to the iPhone of the other person. The other person should then accept the transaction, and the money is transferred to their Apple Cash account.



(Credit: PCMag / Apple)

See, e.g., Lance Whitney, How to Send Money to Friends (or Request They Pay Up) With Apple Cash, PCMag (Aug. 15, 2024), https://www.pcmag.com/how-to/use-apple-cash-send-request-money.